Part 11 · The Escape Challenge

Five gates, each a calculation. Each gives you one digit. Collect all five to unlock the exit code.

□ GATE 1 — The Circle Gate

Find the area (cm²) of a circle of radius 7 cm, using $\pi = \frac{22}{7}$. Take the first digit of your answer.

Digit: □

□ GATE 2 — The Sector Gate

Find the area (cm²) of a sector of radius 21 cm and angle 60°, using $\pi = \frac{22}{7}$. Take the number of hundreds in your answer.

Digit: □

□ GATE 3 — The Quadrant Gate

A quadrant of a circle of radius 14 cm has what area (cm²), using $\pi = \frac{22}{7}$? Take the last digit.

Digit: □

□ GATE 4 — The Ring Gate

Two concentric circles have radii 14 cm and 7 cm. Find the area (cm²) of the ring between them, using $\pi = \frac{22}{7}$. Take the first digit.

Digit: □

□ GATE 5 — The Minute Gate

How many degrees does a minute hand sweep in one minute?

Digit: □

EXIT CODE: □ □ □ □ □

Every pizza slice, brooch, umbrella panel and racetrack in this chapter is just a fraction of a circle — find the angle, apply the fraction, and the area follows. □□